

AMENDMENTS TO THE CLAIMS

- 1. (Currently Amended)** A variable gain amplification circuit comprising:

a signal generator having an output load part comprising a variable resistor or a variable inductor, and an output terminal;

a variable capacitor connected to between said output terminal and an AC grounded terminal; and

a control circuit operable to control an output amplitude of said signal generator and a capacitance value of said variable capacitor,

wherein said control circuit controls the capacitance value of said variable capacitor so that as to make a cutoff frequency or a resonance frequency of said signal generator becomes constant.
- 2. (Currently Amended)** A variable gain amplification circuit as defined in Claim 1, wherein said signal generator includes [[a]] the variable resistor at [[an]] the output load part thereof.
- 3. (Currently Amended)** A variable gain amplification circuit as defined in Claim 1, wherein said signal generator includes [[a]] the variable inductor at [[an]] the output load part thereof.
- 4. (Previously Presented)** A variable gain amplification circuit as defined in Claim 1, wherein said signal generator comprises:

a variable gain mixer having a first input terminal and a second input terminal;
an RF signal source connected to said first input terminal of said variable gain mixer; and
an LO signal source connected to said second input terminal of said variable gain mixer.

5. (Previously Presented) A variable gain amplification circuit as defined in Claim 1,
wherein said signal generator comprises:

a variable gain amplifier having a first input terminal; and
an RF signal source connected to the first input terminal of the variable gain amplifier.

6-14. (Cancelled)

15. (Previously Presented) A variable gain amplification circuit as defined in Claim 5,
wherein said RF signal source has a signal band equal to or larger than 100MHz.

16. (New) A variable gain amplification circuit comprising:

a signal generator having an output load part comprising a variable resistor or a variable
inductor, and an output terminal;

a variable capacitor connected between said output terminal and an AC grounded
terminal; and

a control means for controlling an output amplitude of said signal generator and for
controlling a capacitance value of said variable capacitor so as to make a cutoff frequency or a
resonance frequency of said signal generator constant.

17. (New) A variable gain amplification circuit as defined in Claim 16,
wherein said signal generator includes the variable resistor at an output load part thereof.

18. (New) A variable gain amplification circuit as defined in Claim 16,
wherein said signal generator includes the variable inductor at an output load part thereof.

19. (New) A variable gain amplification circuit as defined in Claim 16, wherein said
signal generator comprises:

a variable gain mixer having a first input terminal and a second input terminal;
an RF signal source connected to said first input terminal of said variable gain mixer; and
an LO signal source connected to said second input terminal of said variable gain mixer.

20. (New) A variable gain amplification circuit as defined in Claim 16, wherein said
signal generator comprises:

a variable gain amplifier having a first input terminal; and
an RF signal source connected to the first input terminal of the variable gain amplifier.

21. (New) A variable gain amplification circuit as defined in Claim 20, wherein said RF
signal source has a signal band equal to or larger than 100MHz.